

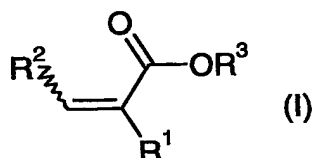
## Claims

1. An insecticide composition for application to a textile material or plastics material which composition comprises a mixture including

5

- a) at least one insecticide and/or at least one repellent as component A, and  
 b1) at least one acrylic binder as component B1 obtainable by emulsion polymerisation of the following components:  
 b1a) n-butyl acrylate as component B1A,  
 b1b) at least one monomer of formula I as component B1B

10



wherein

R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup> are independently selected from C<sub>1</sub>- to C<sub>10</sub>-alkyl which may be linear or branched; substituted or unsubstituted aryl;

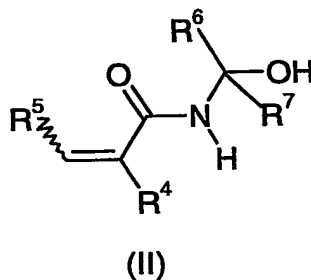
15

R<sup>1</sup> and R<sup>2</sup> may further be H;

except of R<sup>3</sup> = n-butyl, when R<sup>1</sup> and R<sup>2</sup> are H;

20

- b1c) at least one monomer of formula II as component B1C



wherein

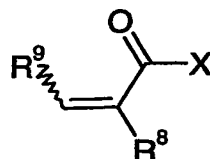
R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup> and R<sup>7</sup> are independently selected from the group consisting of H, C<sub>1</sub>- to C<sub>10</sub>-alkyl which may be linear or branched; substituted or unsubstituted aryl;

25

- b1d) optionally at least one monomer of formula III as component B1D

30

53

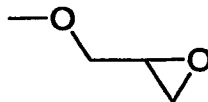


(III)

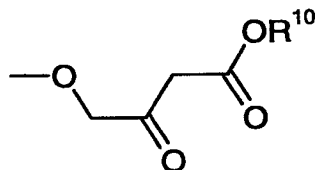
wherein

$R^8$  and  $R^9$  are independently selected from the group consisting of H,  $C_1$ - to  $C_{10}$ -alkyl which may be linear or branched; substituted or unsubstituted aryl;

X is selected from the group consisting of H, OH,  $NH_2$ ,  $OR^{11}OH$ , glycidyl, hydroxypropyl,



groups of the formula



wherein

$R^{10}$  is selected from the group consisting of  $C_1$ - to  $C_{10}$ -alkyl which may be branched or linear; substituted or unsubstituted aryl;

$R^{11}$  is selected from the group consisting of  $C_1$ - to  $C_{10}$ -alkylene; substituted or unsubstituted arylenes;

b1e) further monomers which are copolymerizable with the monomers mentioned above selected from

b1e1) polar monomers as component B1E1;

and/or

b1e2) non polar monomers as component B1E2;

and/or

b2) at least one polyurethane as component B2, obtainable by reaction of the following components:

b2a) at least one diisocyanate or polyisocyanate as component B2A;

- b2b) at least one diol, triol or polyol as component B2B, preferably aliphatic, cycloaliphatic and/or araliphatic diols having 2 to 14, preferably 4 to 10 carbon atoms, more preferably 1,6-hexanediol or neopentyl glycol;
- b2c) optionally further components as component B2C; and
- b2d) optionally further additives as component B2D.
2. The insecticide composition as claimed in claim 1, wherein the acrylic binder is obtainable by emulsion polymerization of the following components:
- b1a) 10 to 90% by weight, preferably 15 to 80% by weight, more preferably 20 to 70% by weight of component B1A;
- b1b) 10 to 90% by weight, preferably 12 to 85% by weight, more preferably 15 to 65% by weight of component B1B;
- b1c) 1 to 5 % by weight of component B1C;
- b1d) 0 to 5 % by weight, preferably 1 to 4 % by weight, more preferably 0.2 to 3% by weight of component B1D;
- b1e) further monomers which are copolymerizable with the monomers mentioned above selected from
- b1e1) 0 to 30 % by weight, preferably 0 to 25 % by weight, more preferably 5 to 20 % by weight of component B1E1; and/or
- b1e2) 0 to 40 % by weight, preferably 0 to 30 % by weight, more preferably 5 to 20 % by weight of component B1E2;
- wherein the sum of the components B1A, B1B, B1C and optionally B1D and B1E is 100 % by weight.
3. The insecticide composition as claimed in claim 1 or 2, wherein the polyurethane is obtainable by reaction of the following components:
- b2a) 55 to 99 % by weight, preferably 70 to 98 % by weight, more preferably 75 to 90 by weight based on the polyurethane of component B2A;
- b2b) 10 to 90% by weight, preferably 12 to 85% by weight, more preferably 15 to 65% by weight based on the polyurethane of component B2B;
- b1c) 0 to 10 % by weight, preferably 0.1 to 5 % by weight, more preferably 1 to 5 % by weight based on the polyurethane of component B2C; and
- b1d) 0 to 10 % by weight, preferably 0.1 to 5 % by weight, more preferably 0.5 to 5 % of component B2D;

wherein the sum of the components B2A, B2B, optionally B2C and optionally B2D is 100 % by weight.

4. The insecticide composition as claimed in any of claims 1 to 3, wherein the insecticide is selected from
  - pyrethroid compounds such as
  - Etofenprox: 2-(4-ethoxyphenyl)-2-methylpropyl-3-phenoxybenzyl ether,
  - Chlorfenapyr: 4-bromo-2-(4-chlorophenyl)-1-ethoxymethyl-5-(trifluoromethyl)-pyrrole-3-carbonitrile,
  - Fenvalerate: (RS)-alpha-cyano-3-phenoxybenzyl (RS)-2-(4-chlorophenyl)-3 methylbutyrate,
  - Esfenvalerate: (S)-alpha-cyano-3-phenoxybenzyl (S)-2-(4-chlorophenyl)-3-methylbutyrate,
  - Fenpropathrin: (RS)-alpha-cyano-3-phenoxybenzyl 2,2,3,3-tetramethylcyclopropane-carboxylate,
  - Cypermethrin: (RS)-alpha-cyano-3-phenoxybenzyl (1RS)-cis, trans-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate,
  - alpha-Cypermethrin: racemate comprising the (S)- $\alpha$ -(1R) and (R)- $\alpha$ -(1S) diastereomers,
  - Permethrin: 3-phenoxybenzyl (1RS)-cis, trans-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate,
  - Cyhalothrin: (RS)-alpha-cyano-3-phenoxybenzyl (Z)-(1RS)-cis-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropanecarboxylate, lambda-cyhalothrin,
  - Deltamethrin: (S)-alpha-cyano-3-phenoxybenzyl (1R)-cis-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate,
  - Cycloprothrin: (RS)-alpha-cyano-3-phenoxybenzyl (RS)-2,2-dichloro-1-(4-ethoxyphenyl)cyclopropanecarboxylate,
  - Fluvalinate: alpha-cyano-3-phenoxybenzyl N-(2-chloro-alpha, alpha, alpha, alpha-trifluoro-p-tolyl)-D-valinate,
  - Bifenthrin: (2-methylbiphenyl-3-ylmethyl)O(Z)-(1RS)-cis-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate,
  - 2-methyl-2-(4-bromodifluoromethoxyphenyl)propyl (3-phenoxybenzyl)ether,
  - Tralomethrin: (S)-alpha-cyano-3-phenoxybenzyl (1R-cis)3((1'RS)(1', 2', 2', 2'-tetrabromoethyl))-2,2-dimethylcyclopropanecarboxylate,
  - Silafluofen: 4-ethoxyphenyl(3-(4-fluoro-3-phenoxyphenyl)propyl)dimethylsilane,
  - D-fenothrin: 3-phenoxybenzyl (1R)-cis, trans)-chrysanthemate,
  - Cyphenothrin: (RS)-alpha-cyano-3-phenoxybenzyl (1R-cis, trans)-chrysanthemate,
  - D-resmethrin: 5-benzyl-3-furylmethyl (1R-cis, trans)-chrysanthemate,

Acrinathrin: (S)-alpha-cyano-3-phenoxybenzyl (1R-cis(Z))-(2,2-dimethyl-3-(oxo-3-(1,1,1,3,3,3-hexafluoropropoxy)propenyl)cyclopropanecarboxylate,

Cyfluthrin: (RS)-alpha-cyano-4-fluoro-3-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate,

5 Tefluthrin: 2,3,5,6-tetrafluoro-4-methylbenzyl (1RS-cis (Z))-3-(2-chloro-3,3,3-trifluoro-prop-1-enyl)-2,2-dimethylcyclopropanecarboxylate,

Transfluthrin: 2,3,5,6-tetrafluorobenzyl (1R-trans)-3-(2,2-dichlorovinyl)-2,2-dimethyl-cyclopropanecarboxylate,

10 Tetramethrin: 3,4,5,6-tetrahydrophthalimidomethyl (1RS)-cis, trans-chrysanthemate,

Allethrin: (RS)-3-allyl-2-methyl-4-oxocyclopent-2-enyl (1RS)-cis, trans-chrysanthemate,

Prallethrin: (S)-2-methyl-4-oxo-3-(2-propynyl)cyclopent-2-enyl (1R)-cis, trans-chrysanthemate,

15 Empenthrin: (RS)-1-ethynyl-2-methyl-2-pentenyl (1R)-cis,trans-chrysanthemate,

Imiprothrin: 2,5-dioxo-3-(prop-2-ynyl)imidazolidin-1-ylmethyl (1R)-cis, trans-2,2-dimethyl-3-(2-methyl-1-propenyl)-cyclopropanecarboxylate,

D-flamethrin: 5-(2-propynyl)-furfuryl (1R)-cis, trans-chrysanthemate, and 5-(2-propynyl)furfuryl 2,2,3,3-tetramethylcyclopropanecarboxylate;

20 Pyriproxyfen: 4-phenoxyphenyl (RS)-2-(2-pyridyloxy)propyl ether; pyrethrum;

d-d, trans-cyphenothrin: (RS)-alpha-cyano-3-phenoxybenzyl (1RS,3RS;1RS,3SR)-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate;

DDT;

25

Carbamate compounds such as

Alanycarb: S-methyl-N[[N-methyl-N-[N-benzyl-N(2-ethoxy-carbonylethyl)amino-thio]carbamoylethio]thioacetimidate,

Bendiocarb: 2,2-dimethyl-1,3-benzodioxol-4-yl-methylcarbamate),

30

Carbaryl(1-naphthyl N-methylcarbamate,

Isoproc carb: 2-(1-methylethyl)phenyl methylcarbamate,

Carbosulfan: 2,3 dihydro-2,2-dimethyl-7-benzofuranyl[(dibutylamino)thio]methyl-carbamate,

Fenoxycarb: Ethyl[2-(4-phenoxyphenoxy)ethyl]carbamate,

35

Indoxacarb: Methyl-7-chloro-2,2,3,4,5-tetrahydro-2-[methoxycarbonyl (-4-trifluoromethoxyphenyl)]

Propoxur: 2-isopropoxyphenol methylcarbamate,

Pirimicarb: 2-dimethylamino-5,6-dimethyl-4-pyrimidinyl-dimethylcarbamate,

Thiodiocarb: Dimethyl

40

N,N'(thiobis((methylimino)carbonoyloxy)bisetanimidiodithioate).

Methomyl: S-methyl N-((methylcarbamoyl)oxy)thioacetamidate,  
 Ethiofencarb: 2-((ethylthio)methyl)phenyl methylcarbamate,  
 Fenothiocarb: S-(4-phenoxybutyl)-N,N-dimethyl thiocarbamate,  
 Cartap: S,S'-(2-5 dimethylamino)trimethylene)bis (thiocarbamate)hydrochloride,  
 Fenobucarb: 2-sec-butylphenylmethyl carbamate,  
 XMC: 3,5-dimethylphenyl-methyl carbamate,  
 Xylcarb: 3,4-dimethylphenylmethylcarbamate;

organophosphorous compounds such as

- Trichlorfon: Phosphoric acid, (2,2,2-trichloro-1-hydroxyethyl)-, dimethyl ester  
 Fenitrothion: O,O-dimethyl O-(4-nitro-m-tolyl)phosphorothioate,  
 Diazinon: O,O-diethyl-O-(2-isopropyl-6-methyl-4-pyrimidinyl)phosphorothioate,  
 Pyridaphenthion: O-(1,6-dihydro-6-oxo-1-phenylpyrazidin-3-yl) O,O-diethyl phosphorothioate,  
 Pirimiphos-Etyl: O,O-diethyl O-(2-(diethylamino)6-methyl-pyrimidinyl)phosphorothioate, Pirimiphos-Methyl: O-[2-(diethylamino)-6-methyl-4-pyrimidinyl] O,O-dimethyl phosphorothioate,  
 Etrimphos: O-6-ethoxy-2-ethyl-pyrimidin-4-yl-O,O-dimethyl-phosphorothioate,  
 Fenthion: O,O-dimethyl-O-[3-methyl-4-(methylthio)phenyl phosphorothioate,  
 Phoxim: 2-(diethoxyphosphinothioxyimino)-2-phenylacetonitrile,  
 Chlorpyrifos: O,O-diethyl-O-(3,5,6-trichloro-2-pyrinyl)phosphorothioate,  
 Chlorpyrifosmethyl: O,O-dimethyl O-(3,5,6-trichloro-2-pyridinyl)phosphorothioate,  
 Cyanophos: O,O-dimethyl O-(4 cyanophenyl)phosphorothioate,  
 Pyraclofos: (R,S)[4-chlorophenyl]-pyrazol-4-yl]-O-ethyl-S-n-propyl phosphorothioate,  
 Acephate: O, S-dimethyl acetylphosphoroamidothioate,  
 Azamethiphos: S-(6-chloro-2,3-dihydro-oxo-1,3-oxazolo[4,5-b]pyridine-3-yl)methyl phosphorothioate,  
 Malathion: O,O-dimethyl phosphorodithioate ester of diethyl mercaptosuccinate,  
 Temephos: (O,O'(thiodi-4-1-phenylene) O,O,O,O-tetramethyl phosphorodithioate,  
 Dimethoate: ((O,O-dimethyl S-(n-methylcarbamoylethyl)phosphorodithioate,  
 Formothion: S[2-formylmethylamino]-2-oxoethyl]-O,O-dimethyl phosphorodithioate,  
 Phenthoate: O,O-dimethyl S-(alpha-ethoxycarbonylbenzal)-phosphorodithioate;  
 Iodofenphos: O-(2,5-dichloro-4-iodophenyl)-O,O-dimethyl-phosphorothioate.

Insecticides with a sterilising effect on adult mosquitoes such as

- 1-(alfa-(chloro-alpha-cyclopropylbenzylidenamino-oxy)-p-tolyl)-3-(2,6-difluorobenzoyl)urea,

Diflubenzuron:

N-(((3,5-dichloro-4-(1,1,2,2-

tetrafluoroethoxy)phenylamino)carbonyl)2,6 difluoro benzamid,

Triflumuron: 2-Chloro-N-(((4-(trifluoromethoxy)phenyl)-amino-)carbonyl)benzamide, or a triazin such as N-cyclopropyl-1,3,5-triazine-2,4,6-triamin; and

Lambda-cyhalothrine:

$\alpha$ -cyano-3-phenoxybenzyl-3-(2-chloro-3,3,3-trifluoroprop-1-enyl)-2,2-dimethylcyclopropane carboxylate, as a 1:1 mixture of (Z)-(1R,3R), R-ester and (Z)-(1S,3S), S-ester;

the repellent is selected from N,N-Diethyl-meta-toluamide (DEET), N,N-diethylphenylacetamide (DEPA), 1-(3-cyclohexan-1-yl-carbonyl)-2-methylpiperine, (2-hydroxymethylcyclohexyl) acetic acid lactone, 2-ethyl-1,3-hexandiol, indalone, Methylneodecanamide (MNDA), a pyrethroid not used for insect control such as ((+/-)-3-allyl-2-methyl-4-oxocyclopent-2-(+)-enyl-(+)-trans-chrysantemate (Esbiothrin), a repellent derived from or identical with plant extracts like limonene, eugenol, (+)-Eucamalol (1), (-)-1-epi-eucamalol or crude plant extracts from plants like Eucalyptus maculata, Vitex rotundifolia, Cymbopogon martinii, Cymbopogon citratus (lemon grass), Cymbopogon nardus (citronella), IR3535 (ethyl butylacetaminopropionate), icaridin (1-piperidinecarboxylic acid 2-(2-hydroxyethyl)-1-methylpropylester).

niclosamide as suitable mulloscicide;

suitable rodenticides of first generation anticoagulant rodenticides and second generation anticoagulant rodenticides selected from the group consisting of warfarin, chlorphacinone, coumatetralyl as first generation anticoagulant rodenticides, and flocoumafen, brodifacoum, difenacoum, bromadiolone, difethialone, and bromethalin as second generation anticoagulant rodenticides;

suitable fungicides are antifungal agents used in the case of athlete's foot selected from the group consisting of clotrimazole: 1-(2-chlorotriyl)imidazole, miconazole: 1-[2-(2,4-dichlorophenyl)-2-[(2,4-dichlorophenyl)methoxy]ethyl]-1H-imidazole, econazole 4-[2-[(4-chlorophenyl)methoxy]-2-(2,4-dichlorophenyl)-ethyl]-4H-imidazole, tioconazole: 1-[2-[(2-chloro-3-thienyl)methoxy]-2-(2,4-dichlorophenyl)-ethyl]-1H-imidazole, undecylenic acid, terbinafine hydrochloride: N,6,6-trimethyl-N-(naphthalen-4-ylmethyl)hept-2-en-4-yn-1-amine hydrochloride (lamisil topical), and tolnaftate: N-methyl-N-(m-tolyl)-1-naphthalen-3-yloxythioformamide;

further suitable fungicides are

Azoles as Bitertanol, Bromoconazol, Cyproconazol, Difenoconazole, Dinitroconazol, Epoxiconazol, Fenbuconazol, Fluquiconazol, Flusilazol, Flutriafol, Hexaconazol, Imazalil, Ipconazol, Metconazol, Myclobutanil, Penconazol, Propiconazol, Prochloraz, Prothioconazol, Simeconazol, Tebuconazol, Tetraconazol, Triadimefon, Triadimenol, Triflumizol, Triticonazol;

Strobilurine as Azoxystrobin, Dimoxystrobin, Fluoxastrobin, Kresoxim-methyl, Metominostrobin, Orysastrobin, Picoxystrobin, Pyraclostrobin, Trifloxystrobin;

Acylalanine as Benalaxyl, Metalaxyl, Mefenoxam, Ofurace, Oxadixyl;

Aminderivate as Aldimorph, Dodine, Dodemorph, Fenpropimorph, Fenpropidin, Guazatine, Iminoctadine, Spiroxamin, Tridemorph;

Anilinopyrimidine as Pyrimethanil, Mepanipyrim oder Cyprodinil;

Dicarboximide wie Iprodion, Myclozolin, Procymidon, Vinclozolin;

Zimtsäureamide und Analoge as Dimethomorph, Flumetover oder Flumorph;

Antibiotika as Cycloheximid, Griseofulvin, Kasugamycin, Natamycin, Polyoxin oder Streptomycin;

Dithiocarbamate as Ferbam, Nabam, Maneb, Mancozeb, Metam, Metiram, Propineb, Polycarbamat, Thiram, Ziram, Zineb;

Heterocyclische Verbindungen as Anilazin, Benomyl, Boscalid, Carbendazim, Carboxin, Oxycarboxin, Cyazofamid, Dazomet, Dithianon, Famoxadon, Fenamidon, Fenarimol, Fuberidazol, Flutolanil, Furametpyr, Isoprothiolan, Mepronil, Nuarimol, Picobenzamid, Probenazol, Proquinazid, Pyrifenox, Pyroquilon, Quinoxifen, Silthiofam, Thiabendazol, Thifluzamid, Thiophanat-methyl, Tiadinil, Tricyclazol, Triforine, M Anorganika;

Nitrophenylderivate, as Binapacryl, Dinocap, Dinobuton, Nitrophthal-isopropyl; Phenylpyrrole Fenpiclonil, Fludioxonil;

Sulfensäurederivate Captafol, Captan, Dichlofluanid, Folpet, Tolyfluanid;

Sonstige Fungizide as Acibenzolar-S-methyl, Benthiavalicarb, Carpropamid, Chlorothalonil, Cyflufenamid, Cymoxanil, Dazomet, Diclomezin, Diclocymet, Diclofluanid, Diethofencarb, Edifenphos, Ethaboxam, Fenhexamid, Fentin-Acetat, Fenoxanil, Ferimzone, Fluazinam, Fosetyl, Fosetyl-Aluminium, Phosphorige Säure, Iprovalicarb, Hexachlorbenzol, Metrafenon, Pencycuron, Propamocarb, Phthalid, Toloclofos-methyl, Quintozene, Zoxamid.

5. The insecticide composition as claimed in any of claims 1 to 4, wherein the particle size of the insecticide and/or repellent is from 50 nm to 20 µm, preferably 50 nm to 8 µm, more preferably 50 nm to 4 µm, most preferably 50 nm to 500 nm.



- 5 6. The insecticide composition as claimed in any of claims 1 to 5, further comprising one or more component selected from water, preservatives, detergents, stabilizers, agents having UV-protecting properties, optical brighteners, spreading agents, anti-migrating agents, foam-forming agents, wetting agents, anti-soiling agents, thickeners, further biozides, plasticizers, adhesive agents, fragrance, pigments and dyestuffs.
- 10 7. The insecticide composition as claimed in any of claims 1 to 6, comprising from about 0.001 to 95 % by weight of the insecticide and/or repellent.
- 10 8. The insecticide composition as claimed in any of claims 1 to 7, which is provided as a kit for impregnation by the end-user or in a local factory.
- 15 9. The insecticide composition as claimed in claim 8 wherein the composition in the kit is adapted for preparing a solution or emulsion by adding water.
- 20 10. An impregnated textile material or plastics material for insect killing and/or repellence of an insect comprising  
a) at least one insecticide and/or at least one repellent, and  
b1) at least one acrylic binder as claimed in claim 1 or 2;  
and/or  
b2) at least one polyurethane as claimed in claim 1.
- 25 11. The impregnated textile material or plastics material as claimed in claim 10 comprising an insecticide and/or repellent as defined in claim 4.
- 30 12. The impregnated textile material or plastics material as claimed in claim 10 or 11 further comprising one or more components selected from preservatives, detergents, stabilizers, agents having UV-protecting properties, optical brighteners, spreading agents, anti-migrating agents, foam-forming agents, wetting agents, anti-soiling agents, thickeners, further biocides, plasticizers, adhesive agents, fragrance, pigments and dyestuffs.
- 35 13. The impregnated textile material or plastics material as claimed in any of claims 10 to 12 comprising from about 0.001 to 10 % by weight of the weight of the textile material or plastics material of at least one insecticide and/or at least one repellent.
- 40 14. A process for impregnation of a textile material or plastics material comprising the steps

- i) forming an aqueous formulation or a melt, comprising at least one insecticide and/or at least one repellent and at least one acrylic binder and/or at least one polyurethane as defined in the present invention and optionally further ingredients;
- 5 ii) applying the aqueous formulation to the textile material or plastics material by
- iia) passing the textile material or plastics material through the aqueous formulation;
- or
- 10     iib) bringing the textile material or plastics material in contact with a roller that is partly or fully dipped into the aqueous formulation and drawing the aqueous formulation to the side of the textile material or plastics material in contact with the roller;
- or
- 15     iic) double-side coating of the textile material or plastics material;
- or
- iid) spraying the aqueous formulation onto the textile material or plastics material; wherein the spraying is carried out with any suitable device for spraying by hand or automatically, for example with an aerosol can or de-
- 20     vices usually used in a factory;
- or
- iie) applying the aqueous formulation in form of a foam;
- or
- 25     iif) submerging the textile material or plastics material into the aqueous formulation;
- or
- iig) brushing the aqueous formulation onto or into the textile material or plastics material;
- 30     or
- iih) pouring the aqueous formulation onto the textile material or plastics material;
- or
- applying the melt by calendering or with a doctor-blade;
- 35     iii) optionally removing surplus aqueous formulation or surplus melt; and
- iv) drying and/or curing the textile material or plastics material.
15. The process as claimed in claim 14, wherein step iia) is carried out by completely
- 40     submerging the textile material or plastics material in the aqueous formulation ei-

ther in a trough containing the aqueous formulation or passing the textile material or plastics material through the aqueous formulation which is held between two horizontally oriented rollers.

- 5 16. The process as claimed in claim 14 or 15, wherein the insecticide and/or repellent is an insecticide and/or repellent as defined in claim 4.
- 10 17. The process as claimed in any of claims 14 to 16, wherein the aqueous formulation further comprises one or more ingredients selected from the group consisting of detergents, stabilizers, agents having UV-protecting properties, optical brighteners, spreading agents, anti-migrating agents, preservatives, foam-forming agents, wetting agents, thickeners, further biozides, plasticizers, adhesive agents, anti-soiling agents, fragrance, pigments and dyestuffs.
- 15 18. The process as claimed in any of claims 14 to 17 wherein the impregnating composition is provided as a kit for impregnation by the end-user or in a local factory.
- 20 19. The process as claimed in any of claims 14 to 18, wherein the dying of the textile material or plastics material is carried out simultaneously with the impregnation of the textile material or plastics material, wherein an aqueous formulation is formed further comprising at least one dyestuff and/or at least one pigment.
- 25 20. A process for coating a textile material or plastics material by applying a composition comprising at least one insecticide and/or at least one repellent and at least one acrylic binder as defined in claim 1 or 2 and/or at least one polyurethane as defined in claim 1 to the textile material or plastics material.
- 30 21. The process as claimed in claim 20, wherein the composition further comprises one or more ingredients selected from the group consisting of detergents, stabilizers, agents having UV-protecting properties, optical brighteners, spreading agents, anti-migrating agents, preservatives, foam-forming agents, anti-soiling agents, wetting agents, thickeners, further biozides, plasticizers, adhesive agents, fragrance, pigments and dyestuffs.
- 35 22. An exhaust process for impregnation of a textile material or plastics material comprising the steps
- 40 i) placing the textile material or plastics material in an aqueous bath optionally comprising further additives contained in a pressure-proof vessel;
- ii) adding an aqueous formulation comprising at least one insecticide and/or repellent;

iii) heating the aqueous bath to a temperature of 100 to 140°C and keeping the temperature for 20 to 120 minutes;

and

iv) cooling and draining the bath, and rinsing and drying the impregnated textile material or plastics material.

5

23. The process as claimed in claim 22, wherein the aqueous bath comprises as further additives one or more components selected from preservatives, detergents, fillers, impact modifiers, anti-fogging agents, blowing agents, clarifiers, nucleating agents, coupling agents, conductivity-enhancing agents (antistats), stabilizers such as anti-oxidants, carbon and oxygen radical scavengers and peroxide decomposing agents and the like, flame retardants, mould release agents, agents having UV protecting properties, optical brighteners, spreading agents, anti-blocking agents, anti-migrating agents, foam-forming agents, anti-soiling agents, thickeners, further biocides, wetting agents, plasticizers and film forming agents, adhesive or anti-adhesive agents, optical brightening (fluorescent whitening) agents, fragrance, pigments and dyestuffs.

10

15

24. The process as claimed in claim 22 or 23, wherein the aqueous formulation comprising at least one insecticide and/or repellent comprises 0.1 to 45 % by weight of water, based on the total of the components in the insecticide except of water.

20

25. Impregnated textile material or plastics material obtainable by an exhaust process as claimed in any of claims 22 to 24.

25

26. The impregnated textile material or plastics material as claimed in any of claims 10 to 13 or 25, wherein the textile material or plastics material is a netting made from polyester, especially polyethylene terephthalate.

30